ABSTRACT OF THE DISCLOSURE

The present invention discloses methods by which client computers working in a host operating environment can use from external data sources, which methods do not require nonvolatile storage of the data as native data to the host operating environment. The methods operate transparently to a user of a client computer using the data through the host operating environment, and allow the data to be used as a first class participant in the host operating environment. Changes to the data can be saved nonvolitilely in the external data sources.